

REMARKS

*Summary of the Amendment*

Upon entry of the above amendment, the specification and claim 19 will have been amended. Accordingly, claims 1-21 will be pending with claims 1 and 6 being independent.

*Summary of the Official Action*

In the instant Office Action, the Examiner explained that all of pending claims 1-21 would be examined. The Examiner also again failed to acknowledge whether all, some, or none of the priority documents have been received in the parent application. The Examiner also objected to the specification because the term "PU-foam" was not defined. The Examiner next objected to the specification on the basis that it contains new matter. Next, the Examiner rejected claims 1-3 and 6-21 as containing new matter and as being indefinite. The Examiner also rejected claim 6 over the art of record. Finally, the Examiner indicated that claims 4 and 5 contain allowable subject matter and would be allowable if rewritten in independent form. By the present amendment and remarks, Applicant submits that the objections and rejections are improper and/or are overcome, and respectfully requests reconsideration of the outstanding Office Action and allowance of the present application.

***Present Amendment is proper for entry***

Applicant submits that the instant amendment is proper for entry after final rejection since it has been made pursuant to the Examiner's suggestions. In particular, Applicant notes that no question of new matter nor are any new issues raised in entering the instant amendment of the claims and that no new search would be required.

Moreover, Applicant submits that the instant amendment places the application in condition for allowance, or at least in better form for appeal.

Accordingly, Applicant requests that the Examiner enter the instant amendment, consider the merits of the same, and indicate the allowability of the present application and each of the pending claims.

***Acknowledgment of Allowable Subject Matter***

Applicant acknowledges and appreciates the Examiner's indication that claims 4 and 5 contain allowable subject matter and would be allowable if rewritten in independent form. However, at this time, Applicant is not presenting these claims in independent form because it is believed that claim 1, from which these claims depend, is allowable.

***Request for Acknowledgment of foreign priority***

The Examiner has again failed to Acknowledge foreign priority and failed to indicate whether all, some, or none of the certified priority documents have been received.

Applicant respectfully requests that the Examiner indicate that the certified priority

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document has been received in the parent application.

***Acknowledgment of the Examiner's decision to examine claims 6 and 7***

Applicant acknowledges and appreciates the Examiner's decision to examine claims 6 and 7 along with claims 1-5 and 8-21.

***Traversal of Objection to the Specification***

Applicant again submits that the Examiner's objection to the specification as containing new matter is improper because paragraphs [0029], [0031] and [0033]-[0035] of the instant specification do not introduce new matter.

Applicant has previously pointed out to the Examiner that these paragraphs were added to the continuation application to provide antecedent support for the claims and include the same language used in the claims. For Example, paragraph [0029] corresponds to claim 1 of the instant application, paragraph [0031] corresponds to claim 3, and paragraphs [0033]-[0035] correspond to claims 6-14.

Furthermore, Applicant has explained that the language used in these paragraphs and claims find clear support in the parent application 08/955,920 (Attorney Docket No. P16090.S01). For the Examiner's convenience, a copy of this application was attached to the previous Amendment.

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As was explained in Applicant's Rule 1.111 Amendment, specific support for such language can be found in the parent application (labeled P16090.S01) between page 3, line 9 and page 9, line 30. Moreover, to assist the Examiner, Applicant explained therein wherein each recited feature can be found in the parent application.

In regards to the Examiner's assertion that new matter is measured against the disclosure of the parent application and not the continuation, Applicant provided to the Examiner a copy of the parent application, i.e., the document labeled P16090.S01.

In regard to the Examiner's assertion that "the changes to the parent application disclosure as originally filed constitute a preliminary amendment which does not form part of the original disclosure in this continuation application", Applicant is at a loss to understand the meaning of this statement or its relevancy to the instant new matter objection.

Applicant has specifically explained and pointed out where in the parent application there is clear support for the changes to the specification of the instant continuation. As the Examiner well knows, the instant application expressly incorporated by reference the disclosure of the parent application (see paragraph [0001]). Furthermore, the continuation application as filed contained all of the subject matter of the parent application as filed. Indeed, the Examiner has not shown otherwise. Moreover, to assist the Examiner in regards to the new matter rejection of the previous Office Action, Applicant provided to the Examiner a copy of the parent application P16090.S01 as filed, and without any changes

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made by preliminary amendment. Thus, contrary to the Examiner's assertions, Applicant has compared the subject matter in question to the parent application as filed and specifically pointed out where and why there is support therein for the subject matter in question. Applicant reminds the Examiner that Applicant explained on the record in detail (in addressing the Section 112, first paragraph, rejection of the Rule 1.111 Amendment) wherein each feature asserted to be new matter has support in the parent application as filed.

In view of the above and the discussion which follows, Applicant requests that the Examiner reconsider and withdraw the objection to the specification.

***Objection to the Specification is moot***

Applicant submits that the Examiner's objection to the specification because the specification does not define "PU" is improper. Applicant reminds the Examiner that the specification need not disclose or define features which are well with the ordinary skill level or one having ordinary skill in the art and/or which are otherwise well known.

In view of the above, Applicant respectfully requests that the Examiner reconsider and withdraw the objection to the specification.

***Traversal of Rejection under 35 U.S.C. § 112, second paragraph***

Claims 1-3 and 6-21 were rejected under 35 U.S.C. § 112, second paragraph, as being indefinite.

The Examiner apparently asserts that Applicant's use of the phrases "layer of fibers" and "coupled to" renders claim 1 indefinite. Moreover, the Examiner attempts to ascribe some narrow abstract meaning to these terms. Applicant respectfully disagrees with this assertion. As the Examiner well knows, Applicant is entitled to claim the invention in broad terms. Moreover, in interpreting the claims for purposes of section 112, second paragraph, the Examiner must read the claims in light of the specification and what is known in the prior art. Measured against the correct standard, Applicant submits that claim 1 is clearly definite. For example, it is clear from Figs. 1 and 2 that the woven mesh support element 6 is a layer. See also page 10, lines 9-10 of the parent application. Indeed, Fig. 3 shows another embodiment which uses many layers or woven mesh support elements 6. It is also clear from, e.g., page 5, lines 5-6 of the parent application (as filed) and paragraph [0021] of the instant continuation application, that the specification described various ways that the support element 6 can be "coupled to" (i.e., connected to) the ring 5, e.g., by gluing, welding, etc. Applicant reminds the Examiner that Applicant is fully entitled to rely on dictionary definitions of claim terms.

The Examiner also asserts that Applicant's use of the term "foil" renders claim 6

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indefinite because Applicant has not defined the thickness of the foil in the specification. Applicant respectfully disagrees with this assertion. The Examiner has set forth no legal basis in support of such an assertion. Nor has the Examiner set forth how or why one of ordinary skill in the art having read the specification would not understand what is claimed. Applicant has clearly recited “foil” and recited in the claim that the foil has “a centrifugal force resisting tensile strength, at least in the circumferential direction of the tire.” Such information in combination with the specification disclosure is clearly sufficient for one to understand what is claimed. Moreover, it appears that the Examiner has had no difficulty understanding this term since the Examiner understood it to mean a “very thin layer.” Again, Applicant reminds the Examiner that Applicant is fully entitled to rely on dictionary definitions of claim terms.

The Examiner asserts that Applicant’s use of the term “isotropic” in claim 7 renders claim 7 inconsistent with claim 6 and therefore indefinite. Applicant disagrees. The orientation of the foil in claim 6 does not preclude the foil also being isotropic. Claim 6 recites how the foil is oriented and does not recite the structure or form of the foil. Therefore, the foil can have any form, such as isotropic, and still be oriented in a particular direction - just as a sheet of paper can be isotropic as to its form or structure, and be oriented in either a portrait manner or a landscape manner.

The Examiner asserts that Applicant’s use of the phrase “at least one side” in claim

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10 renders the claim indefinite because the specification discloses that it is coupled to the radially outer side. Applicant disagrees. Again, Applicant reminds the Examiner that Applicant is entitled to claim the invention in broad terms. Moreover, Fig. 7 clearly shows the strip 7 having a support element that is coupled to its sides. Additionally, page 8, lines 12-26 and page 10, lines 12-13 provide clear support for this claim language. Again, the Examiner is reminded that Applicant is entitled to claim the invention in broad terms. Moreover, in interpreting the claims for purposes of section 112, second paragraph, the Examiner must read the claims in light of the specification and what is known in the prior art. Measured against the correct standard, Applicant submits that claim 10 is clearly definite.

In regard to claim 19, Applicant has amended this claim consistent with the Examiner's suggestion even though Applicant disagrees with the basis of this rejection.

Thus, Applicant respectfully traverses most of the assertions made by the Examiner in this rejection. Applicant does not dispute that some limitations broadly encompass the invention. Nor does Applicant dispute that some of the Examiner's comments could be adopted without significantly narrowing the claims. However, this is beside the point.

Applicant is unaware of any requirement, under either the patent statutes or rules, requiring Applicant to rewrite the claims in a manner which would please the Examiner or to limit the invention to any particular or preferred disclosed embodiment. Applicant



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reminds the Examiner that if the claim limitations are clear and have support in the specification, they cannot be properly rejected as indefinite merely because the Examiner would prefer that the claims recite more detailed limitations.

Moreover, the Examiner has set forth no legal basis for requiring Applicant to limit the invention. Applicant submits that the requirement that the claims be interpreted in light of the specification provides sufficient basis for the claims being definite. Finally, the Examiner is reminded that Applicant is entitled to the broadest reasonable interpretation permitted by the prior art, and that one of ordinary skill in the art, having read the specification, would understand what the claims define.

Applicant would also like to make general comments in response to the Examiner's numerous grounds of rejection under 35 U.S.C. § 112, second paragraph. The breadth of a claim is not to be equated with indefiniteness. As concerns the breath of a claim, the primary concern is the *scope* of the claim relative to the scope of enablement provided to one skilled in the art by the disclosure. Claims should not be rejected as unduly broad under 35 U.S.C. § 112, second paragraph, for non-inclusion of limitations dealing with factors which must be presumed within the level of one of ordinary skill in the art; the claims need not recite such factors where one of ordinary skill in the art to whom the specification and claims are directed would consider them obvious. *In re Skrivan*, 427 F.2d 801, 166 USPQ 85 (C.C.P.A. 1970).

Moreover, Applicant submits that excessive 35 U.S.C. § 112, second paragraph rejections, should not be used as a substitute for prior art in an attempt to try to get Applicant to narrow the claims. Rather, 35 U.S.C. § 112, second paragraph rejections, should pertain to definiteness and clarity of the claims.

Furthermore, definiteness of claim language is always analyzed in light of the teachings of the prior art, the particular application disclosure as it would be interpreted by one possessing the ordinary level of skill in the pertinent art, and the level of skill of the artisan in that art (*In re Moore*, 439 F.2d 1232, 169 USPQ 236 (C.C.P.A. 1971)). The essential question to be asked under 35 U.S.C. § 112, second paragraph, is whether the scope of the invention sought to be patented can be determined from the language of the claims. If the answer is yes, then the claims should not be rejected as being indefinite based on the second paragraph of 35 U.S.C. § 112. In particular, claims should be analyzed to determine whether they define the invention with a reasonable degree of particularity, clarity, and distinctness. See Patent and Trademark Office, Office of Policy and Dissemination Training Materials on Special Topics, 35 U.S.C. § 112, Second Paragraph, provided by the U.S.P.T.O. Patent Academy to Examiners for training purposes (1998).

Thus, with respect to the above-noted formal rejections, Applicant traverses all grounds of the Examiner's rejection based on the notion that the Examiner is only attacking the scope of Applicants claims, not definiteness. As mentioned above, the breadth of a claim

is not to be equated with indefiniteness.

Needless to say, Applicant is of the opinion, that the Examiner has misapplied 35 U.S.C. § 112, second paragraph, to Applicant's claims. The Examiner has burdened Applicant with excessive grounds of rejections and questions which do not apply to clarity of the claims, but instead deal with the scope and breadth of the invention claimed.

Overall, the questions the Examiner presents are questions which can and should be easily answered by applying basic claim interpretation rules and also relying on the instant disclosure. Applicant respectfully refers the Examiner to review the specification so that the questions he presents can be answered.

Thus, it is believed that each issue indicated by the Examiner has been addressed. Accordingly, the rejection has been rendered moot and/or traversed, and the Examiner is requested to withdraw the indefiniteness rejection.

***Traversal of Rejection under 35 U.S.C. § 112, first paragraph***

Claims 1-3 and 6-21 were rejected under 35 U.S.C. § 112, first paragraph, as being non-enabled.

The Examiner has asserted that there is no literal support in the parent application for the language recited in claim 1. Moreover, the Examiner has gone to great lengths to opine what claim language would have such support. The Examiner then concludes that there is

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no support for the phrases “coupled to” and “at least one layer of fibers oriented in a circumferential direction.” Applicant respectfully disagrees.

Apparently, the Examiner has forgotten that the drawings, the specification and the claims make up the disclosure in evaluating section 112, first paragraph. The Examiner is also apparently under the erroneous belief that claim terms must find “literal support” in the disclosure. The Examiner is entirely incorrect on both counts. Moreover, even if the Examiner were correct, Applicant submits that the original disclosure in the parent application provides clear support for each and every recited feature.

With regard to the term “coupled to”, Applicant again reminds the Examiner that Figs. 1 and 2 show a woven mesh support element 6 in the form of a layer. Indeed, Fig. 3 shows another embodiment which uses many layers of woven mesh support elements 6. It is also clear from, e.g., page 5, lines 5-6 and page 9, lines 9-14 of the parent application (as filed) and paragraphs [0021] and [0061] of the instant continuation application, that the specification described various ways that the support element 6 can be “coupled to” (i.e., connected to) the ring 5, e.g., by gluing, welding, etc.

With regard to the term “at least one layer of fibers oriented in a circumferential direction”, Applicant reminds the Examiner that Figs. 1 and 2 clearly show a woven mesh support element 6 with fibers oriented in the circumferential direction, i.e. most of the fibers are clearly shown in Fig. 2 and oriented in the circumferential direction. It is also apparent

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from, e.g., page 5, lines 16-18 and page 8, lines 1-3 of the parent application (as filed), that the mesh 6 is so oriented to provide tensile strength.

With regard to the Examiner's assertion that the specification does not provide support for a foil that is oriented in a circumferential direction, Applicant notes that Figs. 1 and 2 and page 9, lines 9-14 clearly provide sufficient support for this feature relative to section 112, first paragraph.

Applicant is mindful of the Examiner's extensive discussion in support of this rejection and has fully considered the case law cited by the Examiner. However, it has not escaped Applicant's attention that the Examiner has failed to consider a basic fact, i.e., whether the claims recite features which are not fully supported by the original disclosure. Applicant has gone to great lengths in the Rule 1.111 Amendment to point out how each claim is fully supported by the original disclosure. Accordingly, Applicant reiterates and incorporates those arguments herein and will not repeat them.

Finally, while Applicant has pointed out that each feature is in fact literally disclosed and/or supported in the instant specification, Applicant reminds the Examiner that features can find support or can be inherently disclosed in the figures.

Applicant reminds the Examiner that "the failure of the specification to specifically mention a limitation that later appears in the claims is not a fatal one when one skilled in the art would recognize upon reading the specification that the new language reflects what the

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specification shows has been invented.” See *All Dental Prodx, LLC v. Advantage Dental Products, Inc.*, 02-1107 (Fed. Cir. 2002) noting *Eiselstein v. Frank*, 52 F.3d 1035, 1039, 34 USPQ2d 1467, 1470 (Fed. Cir. 1995). A copy of the *All Dental Prodx* case is attached hereto for the convenience of the Examiner.

Thus, it is believed that each issue indicated by the Examiner has been addressed. Accordingly, the rejection has been rendered moot and the Examiner is requested to withdraw the new matter rejection.

***Traversal of Rejection Under 35 U.S.C. § 102***

Applicant traverses the rejection of claim 6 under 35 U.S.C. § 102(b) as being anticipated by EP 0 663 306.

The Examiner asserted that this document discloses all the features recited in this claim. Moreover, the Examiner has explained that she may disregard the feature “perforated foil” apparently because Applicant has not defined the foil thickness in the specification. Applicant respectfully traverses this rejection and the assertions therein.

Applicant submits that the rejection is entirely improper because this document does not disclose all the recited features of the above-noted claim 6.

Notwithstanding the Office Action assertions as to what this document discloses, Applicant submits that this document fails to disclose, inter alia, an acoustically transparent

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support element comprising *at least one layer of perforated foil oriented in a circumferential direction and having a centrifugal force resisting tensile strength, at least in the circumferential direction of the tire, wherein the centrifugal force resisting tensile strength is achieved by the at least one layer of perforated foil oriented in the circumferential direction*, as recited in independent claim 6.

Clearly, the Examiner has identified no disclosure in this document which discloses this feature. Instead, the Examiner has chosen to disregard a feature which is clearly and positively recited. Further still, the Examiner has boldly proclaimed that a perforated bicycle tube discloses perforated foil. Conspicuously absent from the Examiner's analysis is any legal basis for disregarding this feature or any cases which support the Examiner bold assertions. Thus, Applicant submits that this rejection is entirely improper and should be withdrawn.

Applicant notes that, for an anticipation rejection under 35 U.S.C. § 102(b) to be proper, each element of the claim in question must be disclosed in a single document, and if the document relied upon does not do so, then the rejection must be withdrawn.

Because this document fails to disclose at least the above mentioned features as recited in independent claim 6, Applicant submits that this document does not disclose all the claimed features recited in at least independent claim 6.

Accordingly, Applicant respectfully requests reconsideration and withdrawal of this

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rejection and further requests that the above-noted claims be indicated as allowable.

### CONCLUSION

In view of the foregoing, it is submitted that none of the references of record, either taken alone or in any proper combination thereof, anticipate or render obvious Applicant's invention, as recited in each of claims 1-21. The claims have been amended to eliminate any arguable basis under section 112, first and second paragraph.

Further, any amendments to the claims which have been made in this response and which have not been specifically noted to overcome a rejection based upon the prior art, should be considered to have been made for a purpose unrelated to patentability, and no estoppel should be deemed to attach thereto.

Accordingly, reconsideration of the outstanding Office Action and allowance of the present application and all the claims therein are respectfully requested and now believed to be appropriate.

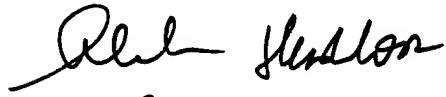
The Commissioner is hereby authorized to credit any overpayment or charge any additional fee to Deposit Account No. 19-0089.



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Should there be any questions, the Examiner is invited to contact the undersigned at the below listed telephone number.

Respectfully submitted,  
Thomas DODT et al.

  
Reg. No. 45,294

Neil F. Greenblum  
Reg. No. 28,394

March 31, 2003  
GREENBLUM & BERNSTEIN, P.L.C.  
1950 Roland Clarke Place  
Reston, Virginia 20191  
(703) 716-1191

Attachment: Appendices 1 and 2  
Copy of the *All Dental Prodx* case.

**APPENDIX 1**

*Changes to paragraph [0050]:*

**[0050]** As Fig. 1 illustrates in the first embodiment of the invention, a ring 5 of sound-absorbing material, situated inside the sealed interior space between the tire 4 and the wheel rim 1, is wrapped around and seated on the wheel rim 1. Open-pore foamed materials particularly well suited for air sound absorption, for example [PU-foams] polyurethane (PU) foams with a weight around 50 kg/m<sup>3</sup> and a mean pore content of approximately 2 mm<sup>3</sup>, as well as other effective sound-absorbing materials such as felt, absorbing cotton, and materials of similar structure can be considered as starting material for the ring 5. In describing the invention, the following only makes reference to foamed material rings but it is, as mentioned earlier, also possible to use other materials.

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**APPENDIX 2**

*Changes to claim 19 as follows:*

19. (Amended) The motor vehicle wheel in accordance with claim 18, wherein the open-pore foamed material comprises a [PU-foam] polyurethane (PU) foam.



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**United States Court of Appeals for the Federal Circuit**

02-1107

ALL DENTAL PRODX, LLC and  
DMG DENTAL-MATERIAL GESELLSCHAFT MBH,

Plaintiffs-Appellees,

v.

ADVANTAGE DENTAL PRODUCTS, INC.,

Defendant-Appellant.

Jeffrey M. Butler, Kenyon & Kenyon, of New York, New York, argued for plaintiffs-appellees. With him on the brief were Richard L. Mayer, and Jeffrey S. Ginsberg.

Douglas W. Sprinkle, Gifford, Krass, Groh, Sprinkle, Anderson & Citkowski, P.C., of Birmingham, Michigan, argued for defendant-appellant.

Appealed from: United States District Court for the Eastern District of New York

Senior Judge Jacob Mishler

# United States Court of Appeals for the Federal Circuit

02-1107

ALL DENTAL PRODX, LLC and DMG DENTAL-MATERIAL GESELLSCHAFT MBH,

Plaintiffs-Appellees,

v.

ADVANTAGE DENTAL PRODUCTS, INC.,

Defendant-Appellant.

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DECIDED: October 25, 2002

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Before NEWMAN, Circuit Judge, FRIEDMAN, Senior Circuit Judge, and LOURIE, Circuit Judge.

LOURIE, Circuit Judge.

Advantage Dental Products, Inc. appeals from the decision of the United States District Court for the Eastern District of New York granting the declaratory judgment plaintiffs All Dental Prodx, LLC and DMG Dental-Material Gesellschaft mbH (collectively, "All Dental") summary judgment that Advantage Dental's U.S. Patent 5,213,498 is invalid and not infringed by All Dental. All Dental Prodx, LLC v. Advantage Dental Prods., Inc., CV-00-2393,-5785 (E.D.N.Y. Aug. 7, 2001). Because the '498 patent has not been shown to be invalid, we reverse that portion of the judgment. Because there are no genuine issues of material fact that All Dental does not infringe the patent, we affirm that portion of the judgment. Accordingly, we affirm-in-part and reverse-in-part.

## BACKGROUND

Advantage owns the '498 patent, which is directed to a method for making a custom dental impression tray. Dentists typically form an impression of a patient's tooth or teeth as part of the process for constructing a crown, cap, or other dental appliance. '498 patent, col. 1, ll. 14-16. The '498 patent describes the prior art impression process as utilizing a suitably sized tray filled with alginate and then placing the tray over the tooth or teeth of which an impression is desired; as the alginate sets, it forms an impression of the area of interest. Id. at ll. 19-26. The invention of the '498 patent improves this process by utilizing less expensive materials and reducing the patient's "chair time." Id. at ll. 31-49. The '498 patent discloses that polycaprolactone, after being heated to the point of pliability (approximately 140°F), can be comfortably molded directly over a person's teeth, without the need for a tray or container. Id. at col. 2, ll. 36-43. After cooling to body temperature, the polycaprolactone mold is rigid, thus forming an impression. Id.

The patent contains two claims, both of which are independent method claims reciting, inter alia, the following step:

- (1) heating an original unidentified mass of thermosetting<sup>\*</sup> material to a predetermined temperature range at which the thermosetting material becomes pliable, . . .

Id. at col. 4, ll. 46-49, 58-61 (emphasis added). The specification does not define the phrase "original unidentified mass," which was introduced into the claims during prosecution. In the first Office Action, the claims were rejected as unpatentable under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent 4,227,877, issued to Tureaud et al., which discloses an acrylic thermoplastic material shaped anatomically in the form of a dental impression tray that can be directly molded within a person's mouth. In response to the rejection, the applicant remarked that Tureaud "does not teach or disclose providing the thermosetting material in an original unidentified mass." Not persuaded, the Examiner again rejected the claims on the same ground, explaining that the "claims do not recite the material in an 'original unidentified mass', rather, they simply recite a material." The applicant later amended the claims to recite that phrase. The Examiner then withdrew the rejection based on Tureaud and rejected the claims as being anticipated by U.S. Patent 4,413,979, issued to Ginsburg et al., which discloses a sheet of moldable thermoplastic material having two ridges to facilitate folding of the sheet into a U-shape to encompass a quadrant of a person's teeth. The applicant traversed the Ginsburg rejection, explaining that the claimed invention "teaches away from applying the thermosetting material in any specific form, such as the preformed sheets disclosed by Ginsburg." The Examiner then allowed the claims and the patent thereafter issued.

All Dental sells a TEMP TABS TRUE BLUE product, which is a flat, oval-shaped polycaprolactone tablet. The tablet is heated until pliable and then molded over a person's tooth where it cools and hardens, thereby making a dental impression. All Dental brought suit seeking a declaratory judgment that the '498 patent was invalid and not infringed by its tablet. The court construed the phrase "original unidentified mass" to mean "a mass that does not have specific preformed size and shape." All Dental Prodx, slip op. at 11. The court granted All Dental summary judgment of noninfringement apparently because the All Dental tablets have a specific preformed shape and size. Id. The court also held both claims of the patent invalid under § 112, ¶¶ 1 and 2. Id. Finding no definition of the phrase "original unidentified mass" in either the patent specification or the prosecution history, the court concluded that "a person skilled in the art would not be able to understand the bounds of the claims." Id. The

court also concluded that the patent "lacks a written description of the invention." Id.

Advantage Dental appeals from the district court's grant of summary judgment. We have jurisdiction under 28 U.S.C. § 1295(a)(1).

### DISCUSSION

We review a district court's grant of summary judgment de novo, reapplying the same standard used by the district court. Ethicon Endo-Surgery, Inc. v. United States Surgical Corp., 149 F.3d 1309, 1315, 47 USPQ2d 1272, 1275 (Fed. Cir. 1998). Summary judgment is appropriate "if the pleadings, depositions, answers to interrogatories, and admissions on file, together with the affidavits, if any, show that there is no genuine issue as to any material fact and that the moving party is entitled to a judgment as a matter of law." Fed. R. Civ. P. 56(c). "The evidence of the nonmovant is to be believed, and all justifiable inferences are to be drawn in his favor." Anderson v. Liberty Lobby, Inc., 477 U.S. 242, 255 (1986).

A determination of patent infringement requires a two-step analysis. "First, the court determines the scope and meaning of the patent claims asserted . . . [Second,] the properly construed claims are compared to the allegedly infringing device." Cybor Corp. v. FAS Techs., Inc., 138 F.3d 1448, 1454, 46 USPQ2d 1169, 1172 (Fed. Cir. 1998) (en banc) (citations omitted). Step one, claim construction, is an issue of law, Markman v. Westview Instruments, Inc., 52 F.3d 967, 970-71, 34 USPQ2d 1321, 1322 (Fed. Cir. 1995) (en banc), aff'd, 517 U.S. 370 (1996), that we review de novo, Cybor, 138 F.3d at 1456, 46 USPQ2d at 1172. Step two, comparison of the claim to the accused device, requires a determination that every claim limitation or its equivalent be found in the accused device. Warner-Jenkinson Co. v. Hilton Davis Chem. Co., 520 U.S. 17, 29 (1997). Those determinations are questions of fact. Bai v. L & L Wings, Inc., 160 F.3d 1350, 1353, 48 USPQ2d 1674, 1676 (Fed. Cir. 1998).

The question whether the subject matter of a patent claim fails to meet the written description requirement of 35 U.S.C. § 112, ¶ 1 is a question of fact. Vas-Cath Inc. v. Mahurkar, 935 F.2d 1555, 1563, 19 USPQ2d 1111, 1116 (Fed. Cir. 1991). A determination that a patent claim is invalid for failure to meet the definiteness requirement of 35 U.S.C. § 112, ¶ 2 is "a legal conclusion that is drawn from the court's performance of its duty as the



construer of patent claims[, and] therefore, like claim construction, is a question of law that we review de novo.” Atmel Corp. v. Info. Storage Devices, Inc., 198 F.3d 1374, 1378, 53 USPQ2d 1225, 1227 (Fed. Cir. 1999) (citing Personalized Media Communications, LLC v. Int’l Trade Comm’n, 161 F.3d 696, 705, 48 USPQ2d 1880, 1888 (Fed. Cir. 1998)).

Advantage argues that the district court improperly concluded that the ’498 patent fails to satisfy both paragraphs of 35 U.S.C. § 112, without providing reasoning for those conclusions. As to the adequacy of the written description, Advantage contends that, while the phrase “original unidentified mass” does not literally appear in the specification, one skilled in the art would recognize and know how to practice the claimed invention using “an original unidentified mass” upon reading the specification. As to definiteness, Advantage contends that, while the meaning of the phrase “original unidentified mass” is neither facially apparent nor defined in the patent specification, the prosecution history clarifies the phrase to mean any shape different from a complete impression tray. On the issue of infringement, Advantage argues, based upon its proposed construction of the phrase “original unidentified mass,” that All Dental infringes the patent because its tablets are clearly not in the form of a dental impression tray.

All Dental responds that the “original unidentified mass” language does not appear anywhere in the originally filed patent application, and that it was new matter added during prosecution, arguably in violation of the statute. While acknowledging that the specification need not provide in haec verba support for the language added to the claim, All Dental argues that the originally filed disclosure did not allow one skilled in the art to immediately discern that an “original unidentified mass” limitation was part of the definition of the invention. All Dental also contends that the applicant did not properly act as his own lexicographer in defining the meaning of the phrase “original unidentified mass,” as he failed to clearly define the phrase. All Dental further contends that if the phrase “original unidentified mass” is to have any meaning at all, then it must be that the material lacks a specific preformed shape and size, as the district court concluded. All Dental asserts that its accused tablets do not infringe the ’498 patent because they clearly have a preformed shape, viz., a generally flat, oblong shape.

We agree with Advantage that there are no genuine issues of material fact concerning whether its patent claims comply with the written description requirement of section 112, first paragraph. While the contested language is not a model of clarity, it is also fairly simple and intelligible, capable of being understood in the context of the patent specification. It is thus reasonably clear what the invention is and that the patent specification conveys that meaning.

Section 112, first paragraph, states, inter alia: "The specification shall contain a written description of the invention." 35 U.S.C. § 112, ¶ 1 (2000). In order to comply with the written description requirement, the specification "need not describe the claimed subject matter in exactly the same terms as used in the claims; it must simply indicate to persons skilled in the art that as of the [filing] date the applicant had invented what is now claimed." Eiselstein v. Frank, 52 F.3d 1035, 1038, 34 USPQ2d 1467, 1470 (Fed. Cir. 1995) (citing Vas-Cath, 935 F.2d at 1562, 19 USPQ2d at 1115, and In re Wertheim, 541 F.2d 257, 265, 191 USPQ 90, 98 (CCPA 1976)).

The application for the '498 patent as originally filed did not contain the phrase "original unidentified mass"; indeed, there is no mention of the starting material's shape or form anywhere in the patent specification. However, the failure of the specification to specifically mention a limitation that later appears in the claims is not a fatal one when one skilled in the art would recognize upon reading the specification that the new language reflects what the specification shows has been invented. See Eiselstein, 52 F.3d at 1039, 34 USPQ2d at 1470. Here, the invention involves heating a mass of thermoplastic material that lacks an identifiable form. That invention is described in the specification, albeit not in haec verba. It is also clear what the invention is not. It does not involve heating a thermoplastic mass having an identifiable form or shape. We therefore conclude that there are no genuine issues of material fact that the specification describes the claimed invention within the meaning of the statute. Thus, summary judgment of invalidity for failure to satisfy the written description requirement was erroneous and is therefore reversed.

We also agree with Advantage that its claims comply with the definiteness requirement of section 112, second paragraph. That section states: "The specification shall conclude with

one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention." The primary purpose of the definiteness requirement is to ensure that the claims are written in such a way that they give notice to the public of the extent of the legal protection afforded by the patent, so that interested members of the public, e.g., competitors of the patent owner, can determine whether or not they infringe. Warner-Jenkinson, 520 U.S. at 28-29. That determination requires a construction of the claims according to the familiar canons of claim construction. Only after a thorough attempt to understand the meaning of a claim has failed to resolve material ambiguities can one conclude that the claim is invalid for indefiniteness. Foremost among the tools of claim construction is of course the claim language itself, but other portions of the intrinsic evidence are clearly relevant, including the patent specification and prosecution history. See Standard Oil Co. v. Am. Cyanamid Co., 774 F.2d 448, 452, 227 USPQ 293, 296 (Fed. Cir. 1985) ("The specification is, thus, the primary basis for construing the claims. . . . [T]he prosecution history (or file wrapper) limits the interpretation of claims so as to exclude any interpretation that may have been disclaimed or disavowed during prosecution in order to obtain claim allowance."). The prosecution history can thus be relied upon to clarify the claim meaning and hence provide definiteness. Tex. Instruments Inc. v. Int'l Trade Comm'n, 871 F.2d 1054, 1063, 10 USPQ2d 1257, 1263-64 (Fed. Cir. 1989) ("The public is entitled to know the scope of the claims but must look to both the patent specification and the prosecution history, especially when there is doubt concerning the scope of the claims." (citing McGill Inc. v. John Zink Co., 736 F.2d 666, 221 USPQ 944 (Fed. Cir. 1984))).

In this case, the prosecution history aids in clarifying the meaning of the claim phrase "original unidentified mass." The patent applicant twice distinguished his invention over the prior art on the basis of that limitation. First, the applicant distinguished his invention over Tureaud's anatomically formed tray shape as not being an "original unidentified mass." Secondly, the applicant distinguished his invention over Ginsburg's preformed sheets of thermoplastic material as "teach[ing] away from applying the thermosetting material in any specific form." Each of those statements made during prosecution disclaims a specific shape.

Moreover, the second statement amounts to a characterization of the "original unidentified mass" limitation as not embracing "any specific form." Advantage's argument that the phrase "original unidentified mass" means any shape other than a complete dental tray gives effect to only the first prosecution statement while ignoring the second. Giving proper effect to both statements and the specification's clear indication of the nature of the invention, we conclude that the phrase means exactly what the district court said it means: "a mass that does not have a specific preformed size and shape." All Dental Prodx, slip op. at 11. Where we differ from the district court is on whether the phrase as so construed is indefinite. The meaning of the phrase "original unidentified mass," arrived at after reviewing the specification and consulting the prosecution history, is indeed definite and clear. Thus, the district court construed the phrase correctly, yet erred in concluding that the phrase was indefinite.

Finally, we agree with All Dental that it is entitled to summary judgment of noninfringement. Our conclusion follows from the construction of the phrase "original unidentified mass." All Dental's tablets clearly have a preformed shape; it is uncontested that they are flat, oblong-shaped tablets. Advantage's infringement assertions therefore fail to raise any genuine issues of material fact, and the court's grant of summary judgment of noninfringement is affirmed.

### CONCLUSION

The district court erred in granting summary judgment that the '498 patent claims fail to satisfy the requirements of 35 U.S.C. § 112, and we reverse that decision. However, the court correctly granted summary judgment that Advantage's accused product does not infringe the patent, and we affirm that decision. Accordingly, we

AFFIRM-IN-PART and REVERSE-IN-PART.

### COSTS

Costs to All Dental.

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\* At oral argument, counsel for Advantage conceded that the term "thermosetting" should have been "thermoplastic" in order to correctly describe a material that becomes pliable on heating. We will therefore use the term "thermoplastic" further in this opinion.